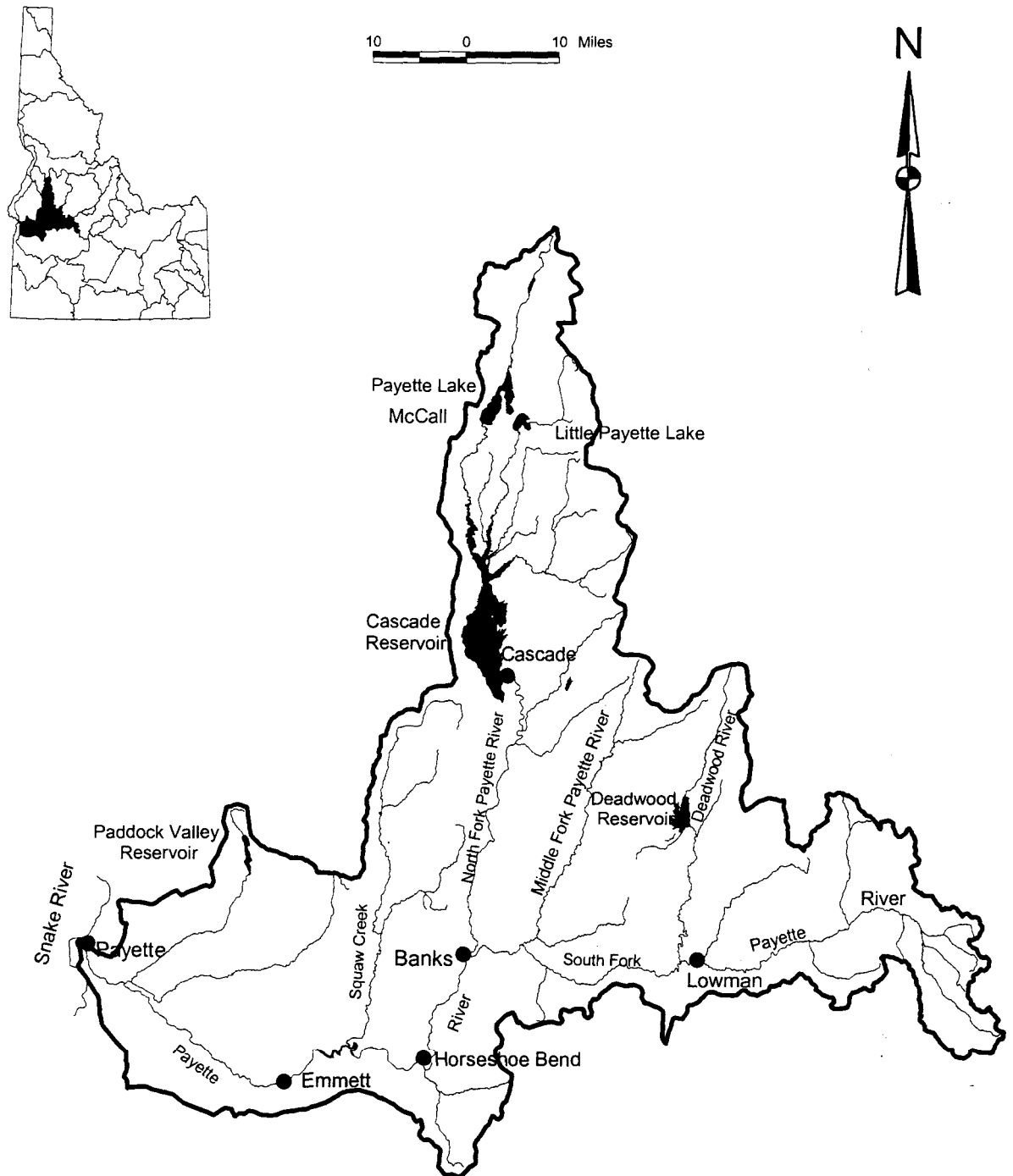


Payette River Drainage



19. PAYETTE RIVER DRAINAGE

A. Overview

The Payette River Basin lies in southwestern Idaho. Its headwaters originate in the Sawtooth and Salmon River mountains at elevations over 10,000 feet. The drainage flows in a southwesterly direction for over 175 miles where it empties into the Snake River near the city of Payette at an elevation of 2,125 feet. The Payette River Basin comprises about 3,240 square miles.

Principal tributaries are the North and South Forks of the Payette River. The North Fork drains about 950 square miles and the South Fork about 1,200 square miles. The Payette River has an average annual discharge into the Snake River of 2,192,000 acre-feet of water. Irrigation accounts for the largest water use, with about 160,000 acres of irrigated farmland. This system also provides water for recreation, hydroelectric generation, mining, and logging. The drainage is comprised of primarily granitic soils, which are highly erosive.

Due to the wide range in elevation, the Payette River has a variety of fish and fish habitats. Salmon and steelhead were eliminated in the drainage by Black Canyon Dam in 1924. From its mouth to Black Canyon Dam, the river supports a mixed fishery for coldwater and warmwater species. Mountain whitefish make up the bulk of game fish in this section of river, with smallmouth bass, largemouth bass, channel catfish, black crappie, and rainbow trout making significant contributions. Upstream from Black Canyon Dam, the gradient of the river increases with coldwater species increasing in abundance. The South Fork of the Payette River supports excellent populations of wild rainbow trout and is one of the more popular recreation rivers in the region. The North Fork of the Payette River has been severely altered by railroad and highway construction and provides only a marginal fishery for salmonids. However, in unaltered sections such as the Cabarton reach, the North Fork is very productive for salmonids.

There are six major impoundments in the Payette basin, Black Canyon, Sagehen, Paddock, Cascade, Horsethief, and Deadwood, and several small impoundments and natural lakes with increased storage, such as the three Payette lakes. Impoundments in the Payette basin primarily serve irrigation needs with flood control and recreation providing additional benefits. Black Canyon Reservoir provides only marginal fish habitat. Sand from upstream land disturbances has covered most habitat. Paddock Reservoir, on Big Willow Creek, has a good fishery for largemouth bass and bluegill. Cascade Reservoir on the North Fork was once the most heavily fished water in the state. Anglers fishing Cascade had the opportunity to harvest an abundance of yellow perch, coho salmon, and rainbow trout. Since the mid-90s however, the yellow perch population has crashed and success of coho salmon has been marginal. Deadwood Reservoir provides a popular fishery for kokanee and cutthroat trout.

Alpine lakes within the Payette River drainage provide anglers with a variety of fishing opportunity. Rainbow trout, cutthroat trout, rainbow trout x cutthroat trout hybrids, golden trout, and arctic grayling are stocked in alpine lakes within the drainage. Brook trout are also present in a number of lakes, but in many cases have stunted and alternative management may be warranted. There are a total of 178 alpine lakes in the Payette drainage. Many of these lakes are too small to support a fishery. The Department

presently stocks approximately ninety of the alpine lakes in the Payette River system. A number of alpine lakes in the Payette River drainage have self-sustaining populations.

B. Objectives and Programs

1. Objective: Provide a diversity of fishing opportunities within the Payette River drainage.

Program: Zone the stream areas to concentrate hatchery catchable stocking in locations where the highest return-to-creel will occur.

Program: Manage for wild trout where habitat and fish populations will sustain an acceptable fishery.

Program: Manage for increased catch rates and size in selected stream reaches using quality trout regulations.

Program: Stock appropriate strains of trout in natural production areas to better utilize the rearing capacity and provide larger and more desirable fish.

Program: Stock adult steelhead directly downstream from Black Canyon Dam as these fish are available. Low river flow and ample notification of anglers must be accomplished to be successful.

Program: Increase warm water angling opportunity by acquiring access or title to ponds in the Lower Payette River drainage.

Program: Seek funding construction of new ponds near urban areas.

Program: Improve land-use management through working with federal, state, and private land owners on proper land uses to increase soil stability in the drainage.

Program: Monitor angler use of trophy trout waters. When use becomes moderate to heavy develop additional trophy trout waters.

2. Objective: Assess the potential for securing stream maintenance flows to protect fisheries on the North Fork Payette River, Lake Fork Creek, and other tributaries.

Program: Gather needed biological and economic information for the Idaho Water Resource Board to justify pursuing stream maintenance flows for fish and wildlife protection.

3. Objective: Maintain riparian and floodplain values for fish and public access.

Program: Work with Valley County to limit residential development in the floodplain.

Program: Work with Valley County and landowners to provide public access to the North Fork Payette River.

4. Objective: Maintain/enhance the large-size, mature nature of the lake trout population in Payette Lake.

Program: Maintain trophy regulations for lake trout to maximize numbers of large, mature fish.

Program: Begin lake trout stocking program to replace old growth fish.

5. Objective: Recover the yellow perch fishery in Cascade Reservoir.

Program: Determine causes of the yellow perch population crash in Cascade Reservoir.

Program: Implement solutions to recover yellow perch numbers.

6. Objective: Improve distribution and population status of bull trout.

Program: Continue angler educational signage about bull trout in the drainage.

Program: Continue to define and monitor populations of bull trout.

7. Objective: Provide a diversity of alpine lake fishing opportunities.

Program: Monitor existing trophy alpine lakes.

Program: Investigate additional alpine lakes for different management opportunity.

Drainage: PAYETTE RIVER					
Water	Miles/acre	Fishery			Management Direction
		Type	Species Present	Management	
Mouth to Black Canyon Dam	72/	Mixed	Smallmouth bass Channel catfish Largemouth bass Black crappie Flathead catfish Bullhead Bluegill Yellow perch Pumpkinseed Mountain whitefish Rainbow trout	General	Put-and-take with catchable rainbow trout and steelhead directly below Black Canyon Dam. Determine catch rates for existing fishery. Determine angler satisfaction with fishery. Investigate return of stocked hatchery trout below Black Canyon Dam. Develop angler fishery and fishery access brochure for this area.
Black Canyon Reservoir	/1,100	Warmwater	Largemouth bass Black crappie Bullhead Bluegill Channel catfish	General	Monitor fish composition and size structure during this five-year period.
Black Canyon to South Fork/North Fork Confluence	107/	Coldwater	Rainbow trout Mountain whitefish Cutthroat trout Bull trout	General	Maintain as a non-stocking native fishery. Evaluate fish and habitat by visual and snorkeling techniques.
				Conservation	Closed to harvest.
Emmett Airport and Star Lane ponds	/4	Mixed	Largemouth bass Bullhead Bluegill Pumpkinseed Channel catfish	General	Monitor fish composition and size structure. Add appropriate stocks of fish to provide an increased fishery.
Paddock Reservoir	/1,302	Mixed	Largemouth bass Black crappie Bullhead Bluegill Rainbow trout	General	Evaluate past introduction and establishment of black crappie. Investigate the feasibility of planting Lahontan cutthroat trout to develop coldwater fishery. Utilize excess steelhead smolts to supplement fishery.
Warmwater lowland ponds and reservoirs	/200	Warmwater	Largemouth bass Bluegill Pumpkinseed Bullhead Smallmouth bass Channel catfish Black crappie	General	Maintain warmwater populations to use for maximum local fishing. Use stunted stocks for introduction into new water. Inventory and more intensively manage waters on public lands.
Squaw Creek and Willow Creek	71/	Mixed	Rainbow trout	Wild	Maintain native stocks. Inventory for status and distribution of redband trout.
			Bull trout	Conservation	Monitor bull trout populations in upper Squaw Creek drainage. Work with federal agencies to remove migration barriers. Closed to harvest.

Sagehen Reservoir	/180	Coldwater	Rainbow trout Redband trout	Put-and-take trout	Monitor spawning tributaries to Sage Hen Reservoir. Put-and-take with hatchery catchables. Inventory tributary stream to develop a management plan for the natural spawning stocks.
North Fork Payette River from Banks to Smiths Ferry, including tributaries	78/	Coldwater	Rainbow trout Mountain whitefish	Wild	Manage for wild trout. Inventory to assess status of wild rainbow trout fishery. Seek to improve angler access with land management agencies.
North Fork Payette River from Smiths Ferry to Cascade Dam, including tributaries	74/	Coldwater	Rainbow trout Yellow perch Mountain whitefish	Wild General	Manage for wild trout. Encourage land management agencies to leave Cabarton Reach unroaded to protect wild trout.
North Fork Payette River from Tamarack Fall Bridge to Lardo Dam	24/	Coldwater	Rainbow trout Brown trout Mountain whitefish Brook trout Kokanee	Put-and-take trout General	Seek to increase the naturally reproducing trout population. Pursue establishment of stream maintenance flow through Water Resource Board. Work with landowners and land management agencies to protect riparian and floodplain. Discourage residential development near the river. Work with Valley County to maintain public access.
North Fork Payette River from Payette Lake to headwaters, including Fisher Creek and other tributaries	34/	Coldwater	Rainbow trout Brook trout Mountain whitefish Kokanee Cutthroat trout Bull trout	Put-and-take trout General Wild Conservation	Concentrate supplemental hatchery trout in high angler use areas. Continue stocking westslope cutthroat trout to establish self-sustaining population. Protect spawning habitat for kokanee. Maintain spawning season closure for kokanee. Closed to harvest.
Gold Fork Creek and tributaries	49/	Coldwater	Rainbow trout Brook trout Kokanee Bull trout	Put-and-take trout General Conservation	Concentrate supplemental hatchery trout in high angler use areas. Improve natural trout production in drainage. Assess opportunity to seek habitat improvements in drainage by contacting private landowners and land management agencies. Investigate feasibility of providing fish passage over the Gold Fork irrigation diversion dam. Encourage construction of an enhanced wetland/subimpound to maintain the Gold Fork arm at the Cascade Reservoir full pool level.
Lake Fork Creek from mouth to Little Payette Lake, including tributaries	37/	Coldwater	Rainbow trout Kokanee Coho salmon Brook trout Smallmouth bass	General	Pursue establishment of stream maintenance flow through Water Resource Board to provide quality trout stream fishery. Screen major irrigation ditches to prevent fish loss through canals. Assess fish losses occurring in mainstem Lake Irrigation District canal and laterals through biological sampling. Support Lake Irrigation District Canal Company's plans to modify parts of canal system to improve water delivery efficiency. If surplus water is available after reconstruction, pursue establishment of stream maintenance flow. Screen canals found to cause significant fish losses.
Lake Fork Creek from Little Payette Lake to Brown's Pond		Coldwater	Rainbow trout Kokanee	Trophy General	Manage for natural trout production to Little Payette. Maintain trophy regulations to protect spawning adults. Allow kokanee harvest.
Lake Fork Creek from Brown's Pond to headwaters		Coldwater	Rainbow trout Brook trout Bull trout	Put-and-take trout General Conservation	Concentrate supplemental hatchery trout in high angler use areas. Evaluate return to creel and adjust stocking strategy as needed. Closed to harvest.

Boulder Creek and tributaries	17/	Coldwater	Rainbow trout Brook trout	General	Concentrate supplemental hatchery trout in high angler use areas. Enhance natural trout production in drainage. Work with landowners and land management agencies to improve fish habitat.
Valley County ponds	/1,247	Coldwater	Rainbow trout Cutthroat trout	General	Develop diversity and increase fishing opportunity for trout in area ponds by working with landowners to allow public access. Construct small community fishing ponds.
Horsethief Reservoir	/1,270	Coldwater	Rainbow trout Rainbow trout x cutthroat trout hybrids Brook trout Brown trout Yellow perch Splake	General	Maintain as a hatchery-supported fishery due to high angler use and excellent access. Keep year-round season due to public support. Stock trout species and strains that continue to provide good return rates. Monitor perch population and take appropriate management actions to eliminate perch when necessary. Utilize fingerling plants augmented with catchable rainbow trout prior to the general opener. Stock large fingerling brown trout to provide diversity and a large fish component to the harvest.
Trophy Mt. Lakes		Coldwater	Rainbow trout Cutthroat trout Rainbow trout x cutthroat trout hybrids Grayling	Trophy	Monitor success of trophy trout regulations and evaluate need for additional waters.
All other alpine lakes	/1,386	Coldwater	Rainbow trout Arctic grayling Brook trout Cutthroat trout Brown trout Rainbow trout x cutthroat trout hybrids	General	Stock with fingerling salmonids to provide diverse fishing opportunity in backcountry areas. Stock most lakes on a three-year rotation. Provide catch rates of at least 0.5 fish/hour. Explore feasibility of rehabilitating stunted brook trout lakes through stocking predator species or chemical treatments. Work cooperatively with USFS on all projects. Increase the number of lakes under trophy management.
Cascade Reservoir	/28,300	Mixed	Rainbow trout Kokanee Coho salmon Yellow perch Channel catfish Black crappie Smallmouth bass Tiger muskie	General	Manage Cascade Reservoir for both yellow perch and salmonid species as co-equals. Seek to improve warmwater fishing opportunity. Investigate causes of perch population crash and implement strategies to recover population. Improve tributary habitat condition and access for natural trout production. Continue strong support for water quality improvement studies and encourage timely implementation. Creel surveys will be done to assess angler use and harvest and assist in evaluating and refining trout stocking policy if needed. Stock catchable rainbow trout at 5/acre. Best fit stocking program to the reservoir to enhance fishing success and opportunity. Evaluate smallmouth bass, channel catfish, and black crappie population status and potential. Encourage construction of enhanced wetlands/subimpoundments in the Gold Fork and North Fork arms and the development of warmwater fisheries. Evaluate success of tiger muskie introductions and need to continue program.

Little Payette Lake	/1,450	Mixed	Rainbow trout Smallmouth bass Tiger muskie Kokanee	Trophy General	Maintain as trophy trout fishery and overall catch rate of at least 0.5 fish/hour. Refine regulations if warranted to provide large trout for anglers. Monitor nongame fish, trout, and tiger muskie populations. Allow harvest of kokanee. Continue tiger muskie program to utilize sucker and pikeminnow populations.
Upper Payette Lake	/400	Coldwater	Rainbow trout Brook trout Splake	General	Maintain as hatchery-supported system due to high catch rate and excellent return rate. Explore feasibility of alternative species. Maintain catch rates of at least 0.5 fish/hour.
Payette Lake	/5,337	Coldwater	Rainbow trout Cutthroat trout Kokanee Lake trout	General Trophy	Maintain average kokanee size at 10 to 12 inches through population manipulation. Monitor kokanee numbers both in lake and in spawning runs. Protect adult kokanee in North Fork Payette River during spawning. Monitor lake trout population and maintain as trophy size fish by using restrictive size and bag limits and begin stocking program to replace old growth fish. Employ net pen rearing techniques to produce catchable size rainbow trout for release into the lake and as a point of interest to visitors to the area. Encourage wise land management use in adjacent watersheds to maintain high water quality.
Middle Fork Payette River to Silver Creek and up Silver Creek to above Silver Creek Plunge bridge	23/	Coldwater	Rainbow trout Cutthroat trout Mountain whitefish Brook trout Bull trout	Put-and-take trout Conservation	Put-and-take with catchable rainbow trout. Evaluate fishery on a tri-year basis using common database and established snorkeling transects. Construct catchable trout stocking pond near Garden Valley. Closed to harvest.
Middle Fork Payette River upstream from Silver Creek and above bridge directly above Silver Creek Plunge	53/	Coldwater	Rainbow trout Cutthroat trout Mountain whitefish Brook trout Bull trout	Wild Conservation	Non-stocking, retain as a native fishery. Evaluate fishery on a tri-year basis using common database and established snorkeling transects. Closed to harvest.
Deadwood River from mouth to Deadwood Dam, including tributaries	30/	Coldwater	Rainbow trout Mountain whitefish Bull trout	Wild Conservation	Wild trout management. Closed to harvest.

Deadwood Reservoir	/3,000	Coldwater	Kokanee Cutthroat trout Rainbow trout Fall chinook salmon Brook trout Mountain whitefish Bull trout	General Conservation	Manage kokanee fishery to yield four-year-old spawners with mean length that exceeds 13 inches by controlling age class and number of spawners using natural spawning areas. Establish self-sustaining population of westslope cutthroat trout. Closed to harvest.
South Fork Payette River from Mouth to headwaters, including tributaries	41/	Coldwater	Cutthroat trout Brook trout Mountain whitefish Rainbow trout Bull trout	Wild Conservation	Maintain wild trout fishery. Evaluate catch rates and wild trout densities with angler interviews and snorkeling surveys. Closed to harvest.
Clear Creek	22/	Coldwater	Rainbow trout Mountain whitefish Bull trout	Wild Conservation	Wild trout management. Closed to harvest.
Bull Trout and Martin Lakes	/90	Coldwater	Brook trout Rainbow trout Kokanee	General	Put and take rainbow trout stocking.